The opinion in support of the decision being entered today is *not* binding precedent of the Board.

### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte KEVIN A. SEILING and JASON C. SHEPPECK

Application 10/001,730 Technology Center 1700

Decided: August 14, 2007

Before BRADLEY R. GARRIS, PETER F. KRATZ, and CATHERINE Q. TIMM, *Administrative Patent Judges*.

GARRIS, Administrative Patent Judge.

#### **DECISION ON APPEAL**

This is a decision on an appeal under 35 U.S.C. § 134 from the final rejection of claims 1-3, 5, and 18-28. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

Appellants claim a composition for use in structural members comprising a polymer material having internal closed cells and glass fibers that are embedded in the closed cell polymer material which have a fiber length in the range of 50 to 100 microns. Claim 1 is adequately representative of the appealed claims and reads as follows:

1. A composition for use in structural members, said composition comprising:

a polymer material selected from the group consisting of polyvinyl chloride, polyethylene and polypropylene in a concentration of 82% to 99% by weight of the mixture, said polymer material being extruded to have internal closed cells; and

glass fibers that are imbedded in the closed cell polymer material, said glass fibers having a fiber length in the range of 50 to 900 microns and being in the amount of 1% to 18% by weight of the composition.

The references set forth below are relied upon by the Examiner as evidence of obviousness:

Crabtree US 6,062,624 May 16, 2000

Nomura WO 00/03859<sup>1</sup> May 2000

The Examiner concludes that "it would have been obvious to one of ordinary skill in the art to form the structure of Nomura ... with either open or closed cells since Crabtree ... teach[es] that either open or closed cellular material is appropriate for use to fill cavities in a body member of an automobile" (Answer 3-4).

<sup>&</sup>lt;sup>1</sup> In discussing Nomura, both the Appellants and the Examiner refer to and rely upon US Patent No. 6,623,838 B1 as the English language equivalent of the WO '859 reference. We will do likewise.

The Appellants argue that the appealed claims are patentable because (1) the prior art contains no teaching or suggestion of providing Nomura with closed cells as required by the independent claims on appeal and (2) the independent claim limitation "a fiber length in the range 50 to 900 microns" renders the claims patentable as shown by declaration evidence of nonobviousness.

## FINDINGS OF FACT

- (1) It is undisputed that Nomura discloses a composition for use in forming structural members (e.g., for an automobile) which comprises glass fibers in combination with a foamed polymer material of the type here claimed except that Nomura's cells are air permeable (i.e, open) rather than closed. It is also undisputed that Nomura discloses a broad fiber length range of 0.2 to 15 mm. (i.e., 200 to 50,000 microns) which overlaps the here claimed range of 50 to 900 microns.
- (2) Likewise, there is no dispute that Crabtree discloses an acoustical baffle, for use in an automobile, made of a polymer (i.e., of the type used by Nomura and recited in claim 1) which has been foamed to produce cells which are either open or closed cells.

## PRINCIPLES OF LAW AND ANALYSIS

As recently stated by the Supreme Court, "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1739, 82 USPQ2d 1385, 1395 (2007).

The Crabtree reference evinces that open versus closed cells in foamed polymers were known to be alternatives to those with ordinary skill in the art. This supports the Examiner's conclusion that it would have been obvious to provide Nomura's structural member with closed rather than open cells, particularly since this provision yields merely the predictable results of combining known elements (i.e., the foamed structural members of Nomura and the closed cells of Crabtree). Moreover, this obviousness conclusion is reinforced by the prior art discussion in Appellants' Specification which describes prior art structural members of foamed thermoplastics as having either a closed or open structure (Specification 2:20-23).

Appellants argue that Nomura's teaching of air permeable (i.e., open) cells teaches away from closed cells (Br. 6). This is incorrect. Nomura contains no teaching of any kind which would have discouraged an artisan from using closed cells. Therefore, this reference cannot be regarded as teaching away from the use of closed cells. *In re Gurley*, 27 F.3d 551, 552-53, 31 USPQ2d 1130, 1131-32 (Fed. Cir. 1994).

Regarding the here claimed fiber length feature, the undisputed fact that the ranges of claim 1 and Nomura overlap establishes a prima facie case of obviousness. *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003).

As evidence of nonobviousness, the Appellants rely on the § 1.132 Declarations of record by Sutch and Pennington. This reliance is misplaced. These Declarations, which are essentially identical, simply describe in narrative form the development of a polyvinyl chloride/glass fiber blend in which relatively long fibers yielded unsatisfactory results (Sutch Decl. Item

8; Pennington Decl. Item 9) whereas shorter glass fibers somewhere in the 50 to 900 micrometer range were surprisingly found to produce a product with the desired strength and other preferred characteristics (Sutch Decl. Item 9; Pennington Decl. Item 10).

For a number of reasons, these Declarations lack meaningful probative value. First, they clearly are not commensurate in scope with the breadth of the independent claims on appeal with respect to polymer material or glass fiber length. *See In re Peterson*, 315 F.3d at 1320, 65 USPQ2d at 1383. Second, the Declarations contain no information relating to whether the tested products correspond to the here claimed composition in other respects such as the amounts of polymer material and glass fibers as well as the presence of closed rather than open cells. *Id.* Third, these Declarations present no data which shows that Appellants' claimed composition exhibits results which are unexpected relative to the closest prior art (i.e., Nomura). *See In re Baxter Travenol Labs*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1995).

Under these circumstances, it is our ultimate determination that the record evidence as a whole weighs most heavily in favor of an obviousness conclusion.

#### **CONCLUSION OF LAW**

For the above stated reasons, we hereby sustain the § 103 rejection of all appealed claims as being unpatentable over Nomura in view of Crabtree.

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# ORDER

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(iv)(effective Sept. 13, 2004).

# **AFFIRMED**

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